THE INNER ASIAN FRONTIER OF INDIA

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Indian historical thinking was necessarily confined to a large extent to the growth and decline of local dynasties with the result that the overall factors which shaped our life seldom entered into our calculations. But a nation can neglect geography only at its peril.

K. M. PANIKKAR (1955)¹

The position of Russia in Central Asia is that of all civilized States which come into contact with half-savage wandering tribes possessing no fixed social organization. It invariably happens in such cases that the interests of security on the frontier, and of commercial relations, compel the more civilized state to exercise a certain ascendency over neighbours whose turbulence and nomadic instincts render them difficult to live with . . . Such has been the lot of all countries placed in the same conditions. The United States of America, France in Algiers, Holland in her colonies, England in India—all have been inevitably drawn into a course wherein ambition plays a smaller part than imperious necessity, and where the greatest difficulty lies in knowing where to stop.

PRINCE ALEXANDER M. GORCHAKOV (1864)²

The assumption of responsibility for a former imperial frontier has always been one of the most difficult tasks that a successor state can be required to perform; and there are few instances in history where such a state has been able to preserve intact a frontier system of this type once the imperial might which created it has been withdrawn. This is due not only to the fact that normally the successor state does not command the resources available to its former imperial rulers, but also in considerable measure to the wholesale changes in mental climate, orientation and strategical situation consequent upon the collapse of empire. The successor state has in many instances been born in opposition to the imperial power and in the early stages of its independence turns away from all things imperial. Seeking to consolidate its position and authority in relation to other successor states it becomes in-looking rather than out-looking, more concerned with the subdivision of imperial estates and its share of lucrative core areas than less rewarding peripheral zones. With its new responsibilities of government its energy is applied to the regularization of inner patterns of power rather than to those wider, external patterns which had been of major import to its former rulers, and of which, as the governed, it had been only vaguely aware. Its function as a frontier province of an extensive and expansive theatre of power ceases and it must rebuild its own external contacts by working outwards from its own central places in the light of its new geographical position. This reassessment of its situation, however, takes time, and during this formative period the young state is particularly vulnerable to external pressures. Political processes abhor vacuums and lacunae of power are rapidly filled. Unless the state recognizes these wider geographical realities in time, its chances of survival are limited; and history is replete with examples of successor states whose independence was merely a phase in the transfer of allegiance from one side of an imperial frontier to another.

131
Since 1947 India has been caught up in a situation of this type as a successor state to the British Empire in southern Asia. During the early days of her independence she was preoccupied with problems arising from the sub-division of southern Asia between Pakistan and herself. Pakistan as a successor state to even earlier Muslim empires was regarded as her main rival for land and power, and during the last fifteen years the major part of the military resources of both states has been locked up in mutual fear and hostility along their common boundaries and in the debated territory of Kashmir. Much Indian political energy has also been expended on a massive reorganization of her internal administrative components which has involved the rationalization of the exceedingly complex patchwork of political units inherited from the British era. Above all she has been employed in the herculean task of trying to match population growth with economic development. In her external affairs, however, she has shown much less dynamic, and her passion for neutrality and non-alignment in world affairs has led to several costly errors of judgment in the assessment of her strategical position, particularly in relation to China.

The anti-imperialist movement which gave birth to modern India and to other states was directed against invaders who had come by sea and this identification of imperialism with transoceanic activity dies hard. Having secured her oceanic frontiers against the transgressor the battle for freedom and self-determination appeared to have been won, and, apart from the hostility of Pakistan, there seemed to be little danger of aggression from her landward frontiers. Closure of the north-western land-gates to the sub-continent, the traditional invasion route, was now the responsibility of Pakistan. A Burma weakened by the ravages of war and struggling to regain control over her own territories no longer constituted a threat to the north-eastern frontier of India as it had done before the British era. To the north lay the great natural obstacle of the Himalayas and behind them the politically and militarily powerless anachronism of Tibet. The latter though nominally under the suzerainty of China had for many years been virtually independent; and, apart from a curiously worded telegram received in October 1947 from its government congratulating India on her newly won independence and claiming back those territories which British imperialists had taken from Tibet in earlier times, had given no trouble. China itself seemed to be too preoccupied with vast internal changes in her eastern provinces to be much concerned with peripheral affairs in High Asia. Indeed, in spite of the difference in governments India and China appeared to have much in common. Both were fervent advocates of Asia for the Asians. Both faced similar problems in raising the living standards of huge peasant populations and both were undertaking immense programmes of economic development. Cultural and technical missions were exchanged between the two countries; India was a persistent advocate of Communist China's right to a seat in the United Nations; and Mr. Jawaharlal Nehru, the Indian Prime Minister, continually stressed the importance of Sino-Indian friendship as a factor in world peace. In 1954 the two states proclaimed their eternal friend-
Figure 1—The northern frontier of India, 1960.
ship in the so-called Panch-shila or ‘Five Principles’ of peaceful co-existence and mutual respect for each other’s territorial sovereignty. At the same time an agreement was signed regulating commerce and pilgrim traffic between India and Tibet, establishing trade agencies and authorized trade routes and restricting Indian commerce to authorized merchants. By this agreement India gave up all the extraterritorial rights which British India had possessed in Tibet and confirmed that she regarded Tibet as part of the sovereign territory of China. The treaty was hailed in India as a great achievement of Asian statesmanship and a personal victory for Mr. Nehru’s policy of non-alignment. All possible differences between the two greatest powers in Asia appeared to have been solved by one simple declaration of friendship and their respective territories secured by common sense, non-violent, anti-imperialist attitudes.

Subsequent events, however, have demonstrated that India’s confidence in this treaty as a final settlement of possible points of dispute along her extensive northern frontier with a powerful communist state was misplaced. She had been too willing to accept at their face value Chinese promises that economic aid to Tibet would in no way detract from the regional autonomy of that country or the theocratic government of its Dalai Lama, and there is no doubt that the speed and militancy of the Chinese occupation of Tibet both surprised and shocked the Indian Government. It soon became apparent that Communist China was taking very seriously her responsibilities as successor state to the ancient Chinese Empire in Inner Asia. Blocked by American power on the Pacific seaboard and facing immense economic and demographic problems in her eastern provinces China had turned inland once more after a long period of oceanic orientation, seeking, like so many other empires of the past, to relieve pressures in congested home terrains by diverting military and civil energies to frontier zones. Immense road-building works were undertaken to connect Han China with western frontier provinces such as Tibet and Sinkiang. In 1952 a Sikang–Tibet highway was completed as far as Chang-tu and this area removed from Tibetan administration and put under Chinese military control. At the time of the Panch-shila declaration two military highways from China to Tibet were nearing completion, one via Sikang and one via Chinghai, reducing the journey from Peking and Shanghai to Lhasa from three months to twenty days. Since then further military road-building has been undertaken, including a 1300 km. highway from Lhasa to Gartok in western Tibet, where it connects with a road running north to Sinkiang via Aksai Chin (see Fig. 1). In 1956 China announced the beginning of a Peking-Lhasa air service on a ten-hour schedule, and declared her intention of building a railway from Lanchow to Lhasa across oil-rich Chinghai Province. Chinese geologists carried out surveys of potential minerals for economic development. Chinese troops and agriculturalists set up experimental farms to pioneer the way for a considerable influx of Chinese settlers. Large, permanent camps were built at strategic points for a sizeable frontier army and military airfields and bases were constructed at various places on the Tibetan plateau. Within a remarkably short period Tibet
found herself in a Chinese military stranglehold, and it was just a matter of time, hastened by some skilful political manipulation of discordant group interests within Tibetan society by communist experts, before the last semblances of political independence were lost, the Dalai Lama had fled to India, and Chinese school-children in Peking were celebrating the liberation of the Tibetan people and, like school children in Victorian England, were singing songs about ‘the frontier of my motherland’... among ‘snow-covered mountain peaks’.10

The details of this Chinese imperialist expansion, however, were not at first available to the general public in India nor, as Mr. Nehru has later revealed, to many members of the Indian Government. Because of the abrogation in 1954 of all political rights and interests in Tibet, India could not interfere in the internal affairs of Chinese Tibet. Earlier lines of military intelligence which Britain had maintained in central Asia were now closed. Reports of Chinese activities in Tibet which did reach India could be construed as indications of Chinese efforts to carry out long-needed economic reforms in a monastic-feudal society; and, if there were political repercussions, these might be no more serious than the political changes that had occurred in Sikkim, Bhutan,11 Nepal12 and other Indian frontier states since Indian independence.

For, since 1947, India had been attempting to regularize and clarify her relations with the so-called ‘buffer-states’ created by Britain along the southern glacis of the Himalayas. In Sikkim, for example, the granting of independence to India had been followed by civil disturbances aimed at the overthrow of feudal landlords and the Maharajah, and in 1949 Indian forces entered the country to restore order. In 1950 a treaty was signed by India and Sikkim vesting the control of Sikkim’s foreign relations and communications in India, authorizing the stationing of an Indian garrison in Sikkim, and promising the institution of social and economic reforms under Indian guidance. Similarly, the neighbouring hill state of Bhutan gave India control of its foreign relations by the treaty of 1949, but reserved the right to control domestic affairs. In Assam a serious rebellion against the central Indian Government in 1949-50 had been put down by Indian troops, but India was finding it no easy task to establish control over the hill peoples of the North-East Frontier Agency. In Nepal agitation against the economic and political dictatorship of the Rana family of hereditary prime ministers and demands for land and electoral reforms had led in 1950 to open rebellion and the flight of the King (who supported such reforms) to New Delhi, the resignation of the Ranas in 1951, and the restitution of the King to a position of power in his own kingdom such as had been unknown for a century.12 Nepal was an independent kingdom, a member of the United Nations, but conditions there were by no means settled and India was obliged to keep a watchful eye on internal political developments, and upon potential external dangers to Nepalese sovereignty. To the west of Nepal India had assumed responsibility for the many small hill kingdoms of the Punjab and United Provinces Himalayan territories and was attempting to solve some of the administrative problems so raised by the creation of new political units such
as Himachal Pradesh and by strengthening the power of central authorities. In Kashmir also post-independence disturbances had led to Indian military intervention at the request of the Maharajah and since the establishment of a cease-fire line by the United Nations in January 1949 a Kashmiri Government at Srinagar, on the Indian side of the cease-fire line, had been trying to administer this former ‘buffer-state’ under the watchful eyes of Indian and Pakistani armies of occupation.

In all these states political issues were inextricably involved with economic issues, and India’s problem was seen as the task of assisting peasant communities to satisfy legitimate economic aspirations and to achieve freedom from feudal control without at the same time destroying political stability. In consequence, and given the general spirit of amity which prevailed at this time between China and India, it is not difficult to understand why Chinese activities in Tibet were viewed by the Indian Government in a more favourable guise than they later assumed. After all, it could be said, China was facing the same sort of problems in her dealings with Tibet as India faced in her relationships with the hill-states and peoples on the southern flanks of the Himalayas. If the solution proposed by China was different from that proposed by India, that was China’s affair, and non-interference was an integral part of the concept of co-existence.

This attitude had to be revised, however, when it became apparent after 1954 that Chinese activities were not confined to Tibet but were transgressing into territories which India considered to be legally hers. Border patrols sent into the hills to ascertain the situation found Chinese troops occupying localities on the ‘Indian’ side of the Tibetan border in Ladakh, Uttar Pradesh and Assam, and in some instances border incidents led to casualties. At first India took the tolerant view that such transgressions had been made by local Chinese frontier forces with mistaken ideas about the precise alignment of the Indo-Tibetan boundary and without the support and knowledge of the Chinese Central Government. Indeed, it is quite possible that some of the early transgressions were of this type. In order not to disturb the general friendship between China and India for what after all might prove to be only local mistakes, Mr. Nehru decided to withhold knowledge of the transgressions from the Indian public and to take the matter up directly with Chou En Lai and the Central Government of China. The correspondence between the two leaders during the years 1954-60, published by India as a series of White Papers in 1959-60, when it was no longer possible to conceal the seriousness of the dispute, thus constitutes the main source of information on the events leading to the present political situation.\(^{13}\)

The earlier letters of the correspondence deal mainly with local issues and attempt to define the localities of alleged transgression. At this stage it is by no means clear that either leader was certain of the precise location of the points of trespass, and since frequently the same places were known by different names some confusion and delay resulted while geographical literature and maps were
consulted. Indian protests about Chinese transgression at certain specified localities were countered by Chinese protests about Indian transgression at other specified localities until it was realized that the protests of both sides referred to the same locations. This was then followed by a phase in which each side supported its assertions by lists of authorities and maps showing the debated localities on its side of the border, but omitted and refused to comment on authorities which showed them otherwise. Mr. Nehru had to suffer the humiliation of having a map included in his book The Discovery of India quoted by Chou En Lai in support of the Chinese case in Assam, while both used maps in various editions of Encyclopaedia Britannica in support of their arguments. Little selectivity is apparent in this phase of the correspondence, either in relation to the scales and accuracy of the maps quoted or to the degree of authority of the various geographical sources used. Nor is it clear that each side had immediate access to the documents quoted by the other side.14 What is abundantly clear, however, in Mr. Nehru’s letters is a growing feeling of frustration that evidence he puts forward and questions he asks on geographical details are virtually ignored in Chou En Lai’s replies or lost in a haze of vague counter-claims. What is also clear is a growing realization by Mr. Nehru that the transgressions were no mere local incidents but were being used by the Chinese Government to reopen the whole question of the Inner Asian frontier of India, which India had considered long closed.

The later letters show a very altered frontier situation and a consequent deterioration in Sino-Indian political relations. India is now fully aware of the extent of Chinese transgression, particularly in the Aksai Chin area of northeast Ladakh, and it becomes apparent that, while Mr. Nehru and Chou En Lai have been exchanging letters, Chinese troops with local labour have completed a military road through Aksai Chin connecting Sinkiang with Gartok, and occupied many thousands of square miles of northern Ladakh. In a letter dated 17 December, 1959 Chou En Lai refers to the fact that until September, 1958 India was unaware of this achievement as evidence that India did not administer this area, and boldly informs Mr. Nehru that

This area has long been under Chinese jurisdiction and is of great importance to China. Since the Ching Dynasty this area has been the traffic artery linking up the vast regions of Sinkiang and Western Tibet. As far back as the latter half of 1950 [sic] it was along the traditional route of this area that units of the Chinese Peoples Liberation Army entered the Ari area of Tibet from Sinkiang to guard the frontiers. In the nine years since then they have been making regular and busy use of this route to bring supplies. On the basis of this route the motor road over 1200 kilometres long from Yehcheng in S.W. Sinkiang to Gartok in S.W. Tibet was built by Chinese frontier guards together with more than 3000 civilian builders working under extremely difficult conditions from March 1956 to October 1957.18
As the Chinese grip on Tibet tightens the letters of Chou En Lai become more confident and sweeping in their assertions of Chinese rights in the hill country to the south of the main Himalayan range. India is accused of following the example of British imperialists in their attitude towards Tibet:

While embarking on armed aggression against Tibet and conspiring to cause Tibet to break away from China, Britain also nibbled at the frontier of Tibet both on the maps and in deed, which resulted in this boundary line that was later inherited by India and is marked on current Indian maps. Of course, the great Indian people, who treasure peace, can in no way be held responsible for all the acts of aggression committed by Britain with India as its base. It is however surprising that the Indian Government should claim the boundary line which Britain unlawfully created through aggression against Tibet, and which even includes areas to which British authority had not extended, as the traditional customary boundary line, while perversely describing the true traditional customary boundary line pointed out by the Chinese government on the basis of objective facts as laying claim to large areas of Indian territory.16

In fact, as Mr. Nehru knew full well, no precise boundary line had been claimed by the Chinese Government nor objective facts brought forward to support it. Almost the entire case put by Chou En Lai was destructive in character, seeking to demonstrate that the Sino-Indian boundary had never been formally delimited and that as a consequence China was within her legal rights in occupying any territory in which Sino-Tibetan jurisdiction had once obtained providing that no other power exercised active control or was able to demonstrate effective possession. Chinese troops had thus moved forward from their Tibetan bases into those sections of the undelimited frontier zone not effectively occupied by India, and attempts by Indian troops to enter these areas would be regarded as aggression against China and would be met by armed resistance. In order to reduce the danger of border clashes, however, Chou En Lai proposed that each side should withdraw its troops 20 km. from the line to which it ‘exercises actual control in the west’, and then proceed to negotiate a formal Sino-Indian boundary.

India was thus thrown on to the defensive. To recover the frontier territories occupied by China by military action could lead to a general frontier war for which China was much better prepared than India. To accede to Chou En Lai’s request for a zone of disengagement in Ladakh would still leave China in occupation of ‘Indian’ territory and would not prevent border clashes elsewhere on the frontier. To admit that negotiation of a boundary was necessary was in itself a withdrawal from the Indian position that

The Sino-Indian boundary, based on custom and tradition, follows natural features and for the major part this customary and traditional boundary is also confirmed by treaty and agreement. This boundary throughout has
been fixed and well-known for centuries. According to international usage and practice a customary boundary which follows well-known and unchanging natural features like main watersheds stands defined and does not require further or formal definition. It is significant that until recently no Chinese Government ever challenged it, or protested against the exercise of the sovereign jurisdiction of India up to this traditional boundary. In view of all of these facts the Government of India cannot agree that negotiations have to be conducted to reach new agreements for fresh determination of the Sino-Indian boundary.\(^{17}\)

Nevertheless it was clear that something had to be done about the situation, particularly in view of the sharp reaction of Indian public opinion against Chinese transgressions once the information was released. At the risk of admitting that some negotiation was necessary Mr. Nehru indicated on 16 November 1959 that in Ladak India would withdraw west of the boundary line shown on Chinese maps of 1956 if China would withdraw east of the traditional line depicted on Indian maps. This was countered by Chou En Lai in a letter of 17 December 1959 rejecting the proposal and asking why Mr. Nehru did not propose to apply this principle similarly to the North-east Frontier, where the boundary claimed by China coincided with the edge of the Assam plains. Subsequent correspondence and a meeting of the two Prime Ministers in April 1960 having failed to solve the political impasse, both sides agreed to the appointment of a committee of officials and advisers from the two governments empowered to

examine, check and study all historical documents, records, accounts, maps and other material relevant to the boundary question, on which each side relied in support of its stand and draw up a report for submission to the two Governments.

and while this examination of factual material was in progress both parties agreed to make every effort to avoid further friction and clashes in the border areas.

The two teams forming this committee reported to their respective governments at the end of 1960 and subsequently an account of their deliberations has been published by the Ministry of External Affairs, Government of India as the Report of the Officials of the Governments of India and the People’s Republic of China on the Boundary Question (February 1961). This report, and the diplomatic correspondence (1954-59) which preceded it, raise so many issues of a geographical character that, whatever the ultimate political solution of the dispute may be, their position as classics within the literature of political geography appears assured. Some commentary on the nature of the issues raised and the geopolitical significance of the answers given may thus be justified even at this stage in the conflict.
Maps as Evidence in Boundary Claims

During the dispute maps have figured prominently in the evidence offered by both sides to substantiate their boundary claims. Indeed from the Indian point of view Chinese aggression had been carried out not only by the physical advance of Chinese troops into the frontier zone but also by map. In the absence of clear verbal statements by China on the extent of her territorial claims India was obliged in the early stages of the dispute to regard maps published in China as indicators of such claims, and an examination of Chinese maps published over a number of years showed that Chinese cartographic claims far exceeded what India understood to be the limits of Sino-Tibetan territory.

In the Eastern Sector\(^\text{18}\) of the frontier, whereas early maps, such as the Postal Map of China published by the Government of China in 1917, and China in the days of the Ching Dynasty (that is, before 1911) published by the University of Peking in 1925, depict the Assam-Tibetan boundary as following an alignment not unlike the crest-cum-watershed McMahon Line established at the Simla Conference in 1914 (Fig. 4), later Chinese maps deviate considerably from this. The majority of Chinese maps published after 1930 show this boundary following the edge of the Brahmaputra plain from the south-east corner of Bhutan to points where the Dihang, Dibang, and Luhit rivers leave the highlands. Thus in this sector Chinese cartographic aggression long predates the communist seizure of power and the present dispute. As long as China was powerless to give practical effect to this cartographic claim, however, little importance was attached to it. An indication of this is the fact that many Western publications, including, for example, the Times Atlas (1920) and Faber Atlas (1956) continue to show the ‘Chinese alignment’ long after Indian administration was established in the tribal territory to the north of this line. Indeed, from a cartographic point of view there is clearly some basis for the Chinese counter-accusation that British-Indian maps 1930-60 also display cartographic aggression in this sector. Here, then, is an instance of long-standing cartographic claims becoming political realities in the behavioural environments of political leaders when changes in the balance of power and political action bring them into focus.

In the Western and Middle Sectors of the frontier the incidence of cartographic aggression is more difficult to assess than it is in the case of the two clearly opposed alignments of the Eastern Sector. Here Chinese maps have varied considerably in their depiction of the boundary and such variation does not begin to form a consistent pattern until recent times. Again earlier Chinese maps, such as the Postal and Ching Dynasty maps noted above, show boundary alignments not much different from those now claimed by India. A map in the Atlas of Provinces of China compiled by the Chinese Board of Direction for Education and Literature in 1933 also shows little change on this sector. It depicts the boundary in north-east Ladakh as coincident with the Qara Qash-
Shyok watershed, excludes the Chang Chenmo valley, Spanggar Lake and the western part of Pangong Lake from Tibet, and follows the Sutlej-Ganges watershed from the Shipki La Pass to Nilang as do present Indian maps. It does, however, include Demchok in the upper Indus valley within Tibetan jurisdiction. A Map of the Administrative Areas of the Chinese Republic published by

![Map of the Administrative Areas of the Chinese Republic](image)

Figure 2—the south-western boundary of China as depicted on the Map of Administrative Areas of the Chinese Republic issued by the Chinese Ministry of the Interior (December 1947). Note major ‘encroachments’ on the north-east frontiers of India and Burma.
the Chinese Ministry of the Interior in December 1947 (Fig. 2) deviates from
this only to the extent of including more of the Chang Chenmo valley in Tibet,
and the alignment it depicts is repeated by several later maps, for example, a
Map of the People’s Republic of China — published by the Ya Kuang Map
Publishing Society in 1953. After 1950, however, the majority of Chinese maps
show substantial modifications to the boundary alignment. The southern
boundary of Sinkiang is advanced into northern Ladakh and the Qara Qash-Shyok
watershed is deserted for an alignment which cuts across the Shyok
system and excludes Aksai Chin from Ladakh. Spanggur Lake, a large part of
Pangong Lake, and several localities to the south of the watershed in the
Middle Sector of the frontier are shown as belonging to Tibet.

At the meetings of officials of the Indian and Chinese Governments in 1960
it is clear that one of the most important tasks undertaken by the Indian
dlegation was to extract from the Chinese a precise statement of their territorial
claims by requiring from them an official map showing the alignment of the
Sino-Indian boundary as claimed by China. The Indian side thus proposed an
exchange of maps on the scale of 1:1 million — ‘the standard scale for maps
of this nature laid down by the United Nations Cartographical Organization
of which India, the Soviet Union and other countries were members’. The
Chinese side replied that they had no map of a greater scale than 1:5 million
to exchange, and ultimately maps of about this scale were exchanged. The
Chinese provided a map of the Southwestern Frontier Region of China, 1:5
million (Peking, 1960) (Fig. 3), and India a Political Map of India, 1:4.4
million (Survey of India, 1958) and a Physical Relief Map of the Northern
Frontier of India, 1:7 million (Survey of India, 1960). Both sides also accompa-
nied the maps with verbal descriptions of the respective alignments. It should
be noted that the map provided by China at the sixth meeting of the officials on
27 June 1960 was the first completely authoritative map showing the whole
alignment claimed by the People’s Republic of China which had been made
available to the Indian Government since the start of the dispute.

The two claimed alignments of the boundary are shown in Figures 1 and 3.
It will be noted that the Chinese alignment follows the most ‘advanced’ position
of the boundary shown on earlier Chinese maps and deviates from the alignment
depicted on Chinese Ministry of the Interior maps of 1947. In the Western
Sector the southern boundary of Sinkiang ‘runs along the Karakoram Mountain
Range, following broadly the watershed between two big river systems; that of
the Tarim River of Sinkiang and the Indus River which flows to Kashmir’ to
the Karakoram Pass, and thence it ‘runs eastward along the mountain ridge to a
point east of 78° E, turns south-eastward along the high ridge of the Karakoram
Mountains on the east bank of the Shyok river and the northern bank of the
Kugrang Tsangpo River down to the Kongka Pass’. In so doing, of course, it
cuts off from Kashmir the entire Aksai Chin area, which the Indian alignment
encloses by a boundary running north-eastward from the Karakoram Pass
to the Kunlun Range and thence south to the Lanak La Pass, and advances
Figure 3. Copy of map submitted by China at the meeting of Indian and Chinese officials, 1960.
Chinese claims further down the Chang Chenmo valley. South of the Kongka Pass the Tibetan boundary with Ladakh ‘runs through the Ane Pass, cuts across the western half of Pangong Tso, skirts the western side [sic] of the Spanggur Tso up to Mount Sajum, crosses the Shangatsangpu (Indus) River at 33° N, runs along the watershed east of the Keyul Lungpa River and south of the Hanle River up to Mount Shinouw and then runs westward to reach the tri-junction of China’s Ari District and India’s Punjab and Ladakh’. This again shows transgression into territories enclosed by the alignment claimed by India, which cuts across the centre of the Pangong and Spanggur Lakes, crosses the Indus valley between Demchok and Tashigong, follows the watershed between the Hanle River and tributaries of the Sutlej via Imis Pass, crosses the Pare River about five miles downstream of Chumar, and thence reaches Gya Peak (78°24’ E 32°32’ N).19

In the Middle Sector of the frontier the general course of the two alignments is similar but there are significant local deviations, which may be explained by the fact that, wherever the main watershed and Himalayan range conditions the general alignment of the respective boundaries is broken through by river valleys and passes, the Chinese boundary has been advanced locally into ‘Indian’ territory. Thus the Chinese boundary ‘crosses the Siangchuan (Sutlej) River west of Shipki Pass, continues southward along the watershed and crosses the Jadhganga River west of Tsungsha. It then turns east, passes through Mana Pass, Mount Kamet, skirts along the south side of Wuje, Sangcha and Lapthal, again runs along the watershed, passing through Darma Pass, and reaches the tri-junction of China, India and Nepal’. The boundary claimed by India on the contrary follows the main watershed between the Sutlej and Ganges river basins and runs through the centre of the passes.

The old opposition of boundaries in the Eastern Sector described above is maintained in the formally claimed alignments of 1960. The Chinese claim that

The terrain features of this sector are comparatively simple. The greatest part of it — the portion from the southeastern tip of Bhutan eastward to a point west of 94° E, and then northeastward to Nizamghat — follows all along the line where the southern foot of the Himalayas touches the plains on the northern bank of the Brahmaputra River. This portion of the line crosses the Subansiri River south of Bini and the Tsangpo (Brahmaputra) River in the vicinity of Pasighat. From Nizamghat onwards the line turns southeastward and enters mountainous terrain, passing through Painlon Pass, following the valley of the lower reaches of the Tsayul River and reaching the tri-junction of China, India and Burma.19

The Indian alignment on the contrary follows the crest of the Great Himalayan Range, crosses the Tsari River just south of Migyitun, the Dihang River down-
stream of Shirang, follows the watershed of the Dihang and its tributaries, crosses the Luhit River a few miles south of Rima and thence reaches the Burma-India-China tri-junction.

The publication of these maps has important consequences. First, it demonstrates the fact well known to geographers but not always fully appreciated by politicians that a map is the supreme instrument for recording spatial phenomena — that a well-drawn map of appropriate scale, based on accurate surveys and showing a requisite amount of topographic detail, is of inestimable value in border disputes of this kind. Not only is it superior to volumes of verbal description of the alignment of a boundary, which at a later date may be subject to different interpretations, but if suitably compiled it can illustrate the principles on which the alignment was based. In this respect the maps produced by India are superior to those produced by China. They show a knowledge of the frontier zone — a direct cartographic acquaintance based on the long records of the Survey of India — not possessed by China, and this impression is reinforced by the obvious superiority of the geographical information available to the Indian officials during the mutual questioning on points of detail which followed the exchange of maps at the 1960 meetings. Many of the questions concerning precise locations asked of the Chinese officials remained unanswered and the conclusion to be drawn from this and the maps themselves could be that Chinese acquaintance with the zone under discussion is of such recent date that they have not yet been able to complete a detailed survey. In this sense, then, survey data may be construed as evidence of effective occupation of territory, which is another way of expressing the adage that a territory is not effectively ‘discovered’ until it is accurately mapped. Of course, it should be added that, although the advantage at present lies with India, much closer survey and the production of more detailed and larger-scale maps of the Himalayas than are available at present will be required before the boundary can be accurately delimited; in certain parts of the Western Sector of the frontier at least time may well be on the side of the Chinese.

Another important consequence of the formal exchange of official maps during the course of a boundary dispute is that according to international usage the boundaries depicted on such maps may be deemed to represent the maximum territorial claims of the contesting parties. An arbitrator would now find it extremely difficult to accept any extension of claims by either side beyond the respective alignments recorded on the 1960 maps, unless they could provide unquestionable evidence of further acquisitions by peaceful processes embodied in some treaty of accession. Thus from an Indian point of view the 1960 meetings of officials were a success in so far as a precise limit was established for Chinese territorial claims against India and the zones of dispute were more narrowly defined. The Indian Government, however, cannot be unaware of the ominous implications of the Chinese refusal to discuss the Tibetan boundaries with Bhutan and Sikkim, in spite of India’s responsibility for the external relations of these two states. Nor can it be unaware of the great breach in
mapped boundary claims represented by Nepal, the boundaries of which were of course not discussed at the 1960 meetings. Although the Indian Government has frequently asserted that ‘aggression against Nepal will be regarded as aggression against India’, the neutralist policy adopted by independent Nepal since 1958 makes it difficult for India to include the China-Nepal border problems within general discussions on the Himalayan frontier; and it is significant that in March 1960, while the Sino-Indian talks were in progress, Prime Minister Koirala of Nepal visited Peking and signed two agreements with China — one arranging substantial Chinese financial aid for the economic development of Nepal, and another referring to the ‘scientific’ delineation and formal demarcation of the Tibetan-Nepalese border.  

Subsequent Chinese claims to Mount Everest suggest, however, that there may be difficulties in such ‘scientific’ delineation, and although it will be noted that the official Chinese map of 1960 includes the Tibetan boundary with Nepal, an improbable but not impossible change in the political orientation of Nepal could produce a very different southern boundary to Chinese territorial expansion. Thus the mapped southern ‘line of containment’ against Chinese expansion is not quite so firm and final as the 1960 maps would at first sight suggest, but from an Indian point of view the maps are at least a great improvement on the vague claims which preceded them and should terminate Chinese cartographic aggression. Similarly the Chinese must view with satisfaction the fact that India is not pressing claim to those territories north of the Karakoram Range which earlier British-Indian maps show as included within Ladakh (see, for example, G.S.G.S. Hind. 1050, 1: 5 m, 1946). Whereas the Chinese map is indeed a depiction of maximum claims compared with earlier maps, the Indian maps show a withdrawal in northern Kashmir from the flood-tide mark of British imperialist cartography. 

Pre-1960 maps, however, now assume a different function. Whereas earlier in the dispute they could be regarded as registering claims in their own right, especially those published by successive Governments, they now take their place along with other kinds of historical evidence in support or denial of the boundary-alignments shown on the 1960 maps. Thus in dealing with evidence concerning the traditional alignment of particular boundaries many of the maps and geographical authorities which could be dismissed as being non-official and irrelevant in the registration of political claims become important in so far as they reflect general geographical opinion on the ownership of territories at particular times, once the litigants in a boundary dispute have registered their claims on official maps. All geographical literature becomes relevant at this stage, in answer to the question ‘How have men represented this boundary in the past?’ Even Mr. Nehru’s explanation that the ‘Map of India in 1943’ in his book *Discovery of India* was inserted by the publisher without his knowledge does not explain why he took no immediate steps to revise the boundary of Assam shown thereon, nor does it completely absolve him from responsibility. All writers assume responsibility when they describe or depict boundaries, particularly when they are geographers; and thus one can imagine the dismay
of the Indian counsellors attempting to substantiate the crest-cum-watershed as the traditional boundary in Assam when this border is so variously depicted even in recent geographical literature. Thus, for example, O. H. K. Spate followed the Indian alignment of the Assam boundary in his *India and Pakistan* (1954), and in *The Changing Map of Asia: A Political Geography* (1950) (edited with W. G. East) but in his contributions to *The Changing World: Studies in Political Geography*, edited by W. G. East and A. E. Moodie (1956) he included maps showing the Chinese alignment in his chapter on ‘The Resurgence of Asia’ and then reverts to the Indian alignment in maps in later chapters. Also by stressing cartographically the boundaries between India and buffer states such as Nepal and Bhutan, and consistently omitting the boundaries between them and Tibet, his maps give the impression that these states are more closely affiliated with Tibet and China than they are with India. Although this impression is to some extent countered in the text, it should also be noted that the entire Sino-Indian boundary in his map of India and Pakistan in 1955 is shown as undefined. There is, of course, a perfectly sound case for regarding the boundary as ‘undefined’ in the precise sense of the word; but then to depict only one element in a broad and exceedingly complex frontier zone is to accord to the Indian case less than justice. Spate is, of course, by no means alone in his variance in depicting this frontier zone. As noted above many authoritative atlases show similar variance and American political-geographical texts are equally prone (for example, H. W. Weigert and others, *Principles of Political Geography* (New York, 1957) which shows the Chinese alignment in Figure 2-3 but the Indian alignment in Figure 21-1).

The Indian cartographic case for their claimed Assam boundary is based primarily on the map accompanying the Simla Convention of 1914. The Simla Conference (1913-14) was called to define the external relations of Tibet and

![Figure 4](image-url)
was attended by British, Tibetan and Chinese representatives. It followed a disturbed period on the Assam frontier during which China had temporarily reasserted her authority over Tibet, declared Nepal to be a Chinese feudatory, and extended Sino-Tibetan administration among the tribes of the southern glacis of the Assam Himalaya. In 1910 the Dalai Lama fled to India but, following the overthrow of the Manchus in 1911, returned to Tibet and in 1913 issued a Tibetan Declaration of Independence. At the Simla Conference Britain was quite content to recognize a vague, legal suzerainty of China over Tibet provided that in practice Tibet remained virtually independent; and at this time China was in no position to oppose this arrangement. A map was prepared showing the outer limits of Tibet and the division of the country between Inner (eastern) and Outer (western) Tibet. This was signed by Chinese, Tibetan and British representatives and attached to Article 9 of the Simla Convention. Although its main purpose was to define Tibet’s boundaries with China it included the boundary of Tibet towards Assam and northern Burma. This section, known as the McMahon Line after Sir Henry McMahon, the British representative, was accurately delineated on a map in two sheets on a scale of one inch to eight miles, and is reproduced here as Fig. 4. This boundary was confirmed by the Tibetan Government but the Chinese Government failed to ratify the treaty signed by their representative. At the time it was held that Chinese refusal to ratify the agreement on Sino-Tibetan boundaries did not invalidate that section of the treaty regulating Tibetan-Indian relations, and that Tibet at this time was fully entitled to enter into treaties in her own right. China, of course today denies that Tibet was competent to enter into separate treaties with foreign powers, and in consequence holds that the entire Simla Convention is invalid, in spite of the fact that the arrangements made between Tibet and British India at that conference survived until 1954 without serious Chinese objection. Owing to the nature of the country the boundary remained undemarcated, but India argues that map definition of the boundary in this case was sufficient to record delimitation, and that even before the Simla Convention most geographical accounts of the area made it clear that the tribal terrains of the southern slopes of the Assam Himalayas were outside Tibetan jurisdiction. In this context special mention may be made of the map illustrating Archibald Rose’s paper on the Chinese Frontiers of India (1912)\(^{21}\) (which shows the ‘McMahon’ alignment) partly because of its date and partly because of the immense experience Rose had of western China as consul at Tengyueh on the Burma-China border. Rose, indeed, appears to be expressing ideas current at this time in western China concerning the southern limits of the Chinese Empire, and his statements and map are paralleled on numerous occasions by Chinese maps of the early twentieth century.

However, as A. P. Rubin\(^{22}\) points out, in a frontier zone of this kind map definition of the southern limits of Tibet does not necessarily define the northern limits of India. It may merely record one side of a broad frontier ‘no-man’s land’ of tribal territory which did not possess the basic political elements
required for the creation of a buffer state. The Chinese alignment, on the other hand, depicts the southern boundary of this zone, and is virtually coincident with the so-called Inner Line established by British administrators of Assam in 1873. This Line running along the foot of the hills undoubtedly marked the northern limit of normal Indian administration, but, whereas China maintains that it also recorded the northern limit of British-Indian political authority, this is denied by India, and there is a good deal of evidence to support the Indian case.

Assam was ceded to the English East India Company in 1826 by the treaty which concluded the First Burma War. For almost a decade it had been ruled by Burma, but before the Burmese conquest in 1816 it had for centuries constituted the kingdom of the Ahom dynasty. During the period of Ahom decline and during the Burmese interlude the hill tribes around the periphery of the Assam valley achieved a considerable measure of independence and took the opportunity afforded by the absence of centrally organized defence to raid and to establish their authority over certain lowland villages. It is clear, however, that at the height of their power in the seventeenth century the Ahoms extended their authority deep into the hill country, and when Britain took over political control of the ancient Ahom kingdom the economic development of Assam necessitated the re-establishment of similar authority over the hill tribes. Hindu gold-washers and fishermen, tea planters and lowland villages had to be protected against raids by the hill tribes, and equally the terrains of the hill tribes had to be secured against economic penetration by lowland capitalists. For this purpose it became necessary to draw a boundary between the two types of community and terrain, and it was in this context that the Inner Line was established. The title ‘Inner’ is in itself significant. It was not regarded as an interstate (‘Outer’) boundary, but as an internal boundary dividing two forms of administration and political control. The lowlanders below this line could be administered by the system developed in India and were denied entry into the hill country above it without special permission and passes from the Government. The hill folk were similarly restricted in their movements to the lowlands. Tribute (posa) they had earlier collected direct from dependent lowland villages was now paid to them by Revenue Officers, from the general taxation, and trans-Himalayan trade was regulated at a number of hill-foot control points on the Inner Line. The degree of political control exerted over the hill tribes varied, however, from place to place and period to period.

During the early years of the occupation of Assam, tribal attacks on lowland villages were followed by punitive expeditions into the hills, and every opportunity was taken for military detachments to visit hill villages in order to demonstrate their accessibility to the power of the Raj and to make agreements with hill chiefs. In fact, however, difficulties of movement in this jungle-clad hill country severely restricted the size of the forces which could be deployed and most of the larger expeditions failed to penetrate very deeply into the hills. Thus although contact was made at an early date with such peoples as the
Daflas and Mishmis, geographical intelligence about the tribes of the higher valleys, such as the Abors, was often dependent on the deeper penetrative ability of individual explorers, traders, missionaries, and political agents. Their reports, recently edited by V. Elwin,\textsuperscript{23} indicate that to the tribes, the border of Tibet lay far to the north, coincident with the Great Himalayan Range, and that some of the tribes at the heads of the valleys were employed by the Tibetans to guard the passes through this range that constituted the ‘gates of Tibet’. The cost of maintaining normal administrative control over this thinly populated hill country was, however, considered to be excessive, and during the latter half of the nineteenth century, active intervention in tribal affairs was replaced by more subtle and indirect controls such as embargoes on mountain trade and the withholding of posa. At the same time, many agreements were made with tribal chiefs, and geographical knowledge of the zone increased. In 1880, the Government of India sanctioned a Frontier Tract Regulation providing for the appointment of Political Officers under the District Officers of Lakhimpur, Darrang and Dibrugarh to administer justice and revenue in the tribal territories for which the Chief Commissioner of Assam was responsible. In 1914, the administrative system was reorganized to establish three main units; namely, the Central and Eastern Sections, North-East Frontier Tract (later known as the Sadiya Frontier Tract) which comprised the hills inhabited by the Abors, Miris, Mishmis and others; the Western Section, North-East Frontier Tract (later known as the Balipara Frontier Tract) which included the hill territories of the Monbas, Akas, Daflas and others; and the Lakhimpur Frontier Tract, comprising the hills occupied by Singphos, Nagas and Khamptis. These tracts were declared ‘excluded areas’ by Government of India Order of 3 March 1936 and were so administered until 1947. They are now known as the North-East Frontier Agency and detailed provisions for their administration were laid down in the Sixth Schedule of the Constitution of India, which came into effect on 26 January 1950.

Assam thus provides an excellent example of the way in which cartographic evidence considered on its own may often lead to wrong impressions, unless it is interpreted in the light of other relevant geographical, ethnographic, historical and administrative information. Further examples of this principle are to be found in studying the case put forward by India for the boundary alignment in the Western and Middle Sectors of the frontier. Here also, the Indian officials were able to produce a great corpus of cartographic material in support of their case, ranging in date from the sixth century A.D. to modern times. Almost without exception, the early maps cited are of Chinese origin and are used to indicate that the traditional southern border of Sinkiang ran along the Kuen Lun (Tsungling) Range rather than the Karakoram, and that the western and southwestern borders of Tibet traditionally followed the alignment claimed by India. Many of these maps are ‘unofficial’ (that is, non-governmental) but in reply to Chinese objections to the use of unofficial maps of any kind, India maintained that
The Chinese side missed the significance of the unofficial maps cited by the Indian side. These maps, especially when drawn by well-known cartographers on the basis of first-hand information supplied by geographers of repute, provided objective, scientific and disinterested proof of traditional boundary alignments ... The value of unofficial maps ... was that they depicted the traditional and customary boundary alignment as was known at the time.24

This may indeed be so, but what both sides failed to stress was the significance of the fact that, until the nineteenth century, most of the maps were Chinese rather than Indian; and that even if they depicted the limits of Sinkiang and Tibet accurately these did not necessarily constitute the northern borders of India at that time. Thus the maps may prove that Ladakh was not part of China, but equally they do not prove that Ladakh was traditionally part of India.

From the middle of the nineteenth century, however, Indian cartographic evidence becomes more positive in function and Indian in origin, and it is significant that it is included in the Report of the Officials with other materials as ‘evidence regarding Indian administration and jurisdiction of the areas right up to the traditional alignment ... ’ rather than with evidence concerning the ‘traditional and customary basis of the Indian alignment’.25 Ladakh was first brought within the sphere of British India in 1846 as part of the possessions of Gulab Singh, who was created Maharajah of Jammu and Kashmir in that year by the Treaty of Amritsar.26 Four years earlier Gulab Singh had concluded a successful military campaign against Tibet27 and signed a treaty with the Tibetans confirming his position as political overlord of Ladakh, permitting Ladakhis to send annual tribute to the Dalai Lama and to provide facilities for Tibetan traders as was the ancient custom, and undertaking to ‘remain in possession of the limits of the boundaries of Ladakh and the neighbourhood subordinate to it, in accordance with the old customs, and there shall be no transgression and no interference in the country beyond the old established frontiers’.28 Following the creation of the buffer state of Jammu and Kashmir survey parties entered the hills to determine the eastern boundary of the tracts transferred to Gulab Singh. The first British-Indian maps date from this period. India claims that

The official reports and accounts prepared by explorers and surveyors sent by the Government of India to different parts of Ladakh at various times formed conclusive evidence showing that the jurisdiction of the Indian Government extended over these regions29

and that such surveyors were locating and recording ‘old established frontiers’ with Tibet to fix the limits of Indian jurisdiction and revenue settlement. The early surveys and accounts of John Walker and Capt. Henry Strachey,30 which China had used to demonstrate that Aksai Chin and northern Ladakh were not
included within Indian territory, were dismissed by the Indian side on the ground that accurate, detailed surveys of the frontier tracts were not commenced until 1862, when W. H. Johnson, H. H. Godwin Austen and others carried the triangulation of the Great Trigonometrical Survey of India northward from Leh to the Chinese frontiers. The surveyors’ reports of 1862-70 indicate that at this time the Maharajah’s territories were found to extend to the Kuen Lun Mountains in the north and to the centre of Pangong Lake in the east, and to include the Chang Chenmo valley, and the upper reaches of the Qara Qash valley to a point as far downstream as ‘Shahidulla ... the first point where we struck the Atalik’s dominions and met his people’. It is clear from these reports that the surveyors pushed their mapping on till they reached territories belonging to and administered by states outside the control of the Maharajah of Kashmir.

Similarly for the disputed areas in the Middle Sector of the frontier Indian cartographic and administrative evidence increase together during the nineteenth century. For the Spiti area the crucial date is 1846 when Britain took over the direct administration of this former Ladakhi province. In 1849 Spiti became part of the Kangra District of the Punjab. J. Peyton’s survey on a scale of two miles to one inch was completed in 1850-51 and various revenue settlements of the area followed. The Skipki Pass area, now in Himachal Pradesh, formerly constituted part of Bashahr State for which there are land revenue settlements dating from 1853 and surveys dating from 1882. These clearly show that the territory ‘below’ the Pass belonged to the Rajah of Bashahr, that ‘above’ to Tibet, while the Pass itself was known as ‘Pimala’ (‘common pass’). For the Kumaon-Garhwal areas further east the crucial date is 1815 when Britain annexed these former dependencies of the Gurkha kingdom of Nepal during the Gurkha War of 1814-16. Revenue settlements were carried out under the supervision of G. W. Traill, British Commissioner for Kumaon, and topographic surveys were made by Strachey, Johnson, E. C. Ryall and others from 1850 onwards. These surveys and settlements, and the detailed Northern Frontier Survey (four miles to one inch) of 1904-05, show that the disputed areas of Nilang-Jadhung, Niti Pass-Barahoti, and Sangchamalla-Lapthal all lay to the south of the traditional boundary of the Sutlej-Ganges watershed, and in the latter case this was confirmed by a British-Tibetan Commission in 1926.

Thus it will be seen that it is very difficult to separate cartographic evidence from other forms of historical and geographical evidence, and that the function of ‘official’ cartography in boundary disputes tends to be different from ‘unofficial’, private map-making. It will also be seen that official maps may differ in function according to their accuracy, and according to whether they were published before or during governmental boundary debates. Some of these principles are of course well established in international procedure. Thus, for example, as long ago as 1751 the British Commissioners during the dispute over the limits of Nova Scotia were of the opinion that
Maps are from the nature of them a very slight Evidence. Geographers often lay them down upon incorrect Surveys, copying the Mistakes of one another; and if the Surveys be correct, the Maps taken from them, though they may show the true position of a country, the Situation of Islands and Towns, and the Course of Rivers, yet can never determine the Limits of a Territory, which depend entirely upon authentic proof.33

The Boundary Tribunal concerned with the Guatemala-Honduras boundary in 1933 also remarked on the limitations of certain types of cartographic evidence

Authenticated maps are also to be considered, although such descriptive material is of slight value when it relates to territory of which little or nothing was known and in which it does not appear that any administrative control was actually exercised.34

Nevertheless it should be remembered that this Tribunal made considerable use of maps and of air photographs in their deliberations, and that ten years earlier the Permanent Court of International Justice in its Eighth Advisory Opinion on the Polish-Czechoslovakia frontier had stressed some of the advantages as well as limitations of map evidence.

It is true that maps and their tables of explanatory signs cannot be regarded as conclusive proof independently of the text of the treaties and decisions, but in the present case they confirm in a singularly continuing manner the conclusions drawn from the documents and from legal analysis of them; they are certainly not contradicted by any document.35

From such illustrations it is clear that, as geographical knowledge of areas has increased and their cartographic representation has become more accurate, international tribunals concerned with boundary disputes have increasingly considered such evidence as significant.36 The Sino-Indian Boundary dispute has greatly advanced this attitude, and in the clash of Chinese and Indian cartography and particularly in the use made by India of map evidence and geographical descriptions, the principles governing the use of such evidence have been made clearer. It is possible to summarize some of the main principles as follows:

I Maps as claims …

(a) Unofficial, private maps do not represent national claims, no matter how great the geographical authority of the map-maker might be.

(b) Before an actual dispute over the possession of land the depiction of a political boundary on an official map may constitute nothing more than an act of political propaganda unless the claimant state can support it by treaty and/or effective occupation. In itself it gives no more permanent title to land than does the act of discovery.

(c) During a dispute the publication of official maps showing claimed boundary alignments by the litigants is to be regarded as the most
precise and convenient way of registering the maximum territorial claims of the contending parties, providing that the maps are of a sufficient scale and accuracy for this purpose, and that legal transfers of land made during the period of the dispute may legitimately modify such alignments.

II Maps as evidence for claims ...

(a) Where the boundary has not been officially delimited or demarcated unofficial maps may be significant as indications of the traditional alignment of a boundary. Their significance however depends on:

(i) The extent and accuracy of geographical knowledge at the time of their making.

(ii) The consistency of the indications of alignment shown by a series of such maps over a substantial period of time and by different authors.

(iii) The geographical authority of the map-maker or his sources.

(iv) Consideration of the entire alignment depicted, in its negative as well as positive indications, rather than the consideration of only certain sections, out of context, to support particular arguments.

(b) Official maps, governed by similar limitations in respect to traditional alignments, achieve their greatest significance as evidence where they are appended to treaties between frontier communities, or where they and the surveys (Revenue Settlement Surveys, etc.) which produced them can be used as indications of effective occupation.

(c) Both official and unofficial maps used in conjunction with other types of evidence (for example, geographical and historical accounts) may be of significance in indicating the principles on which a boundary is delimited, even if the precise alignment cannot be based on accurate trigonometrical survey. A good example of this is the ‘watershed principle’ on which much of the Indian claim is based; this must now be examined.

The Watershed Principle

During the exchange of correspondence between the Governments of India and China, and the discussions of the Officials in 1960, India has repeatedly stressed that the alignment she claims is the traditional northern boundary of India with Inner Asia and that this in turn is based on the main Himalayan watershed. Thus in the Report of the Officials:

In the discussions on the location and natural features of alignment, the Indian side demonstrated that the boundary shown by India was the natural dividing line between the two countries. This was not a theoretical deduction based on the rights and wrongs of abstract principles. The fact that this line had received the sanction of centuries of tradition and custom
was no matter of accident or surprise because it conformed to the general development of human geography and illustrated that social and political institutions are circumscribed by physical environment. It was natural that peoples tended to settle up to and on the sides of mountain ranges; and the limits of societies—and nations—were formed by mountain barriers. The Chinese side recognized this fact that high and unsurmountable mountain barriers provided natural obstacles and suggested that it was appropriate that the boundary should run along such ranges. But if mountains form natural barriers, it was even more logical that the dividing line should be identified with the crest of that range which forms the watershed in that area. Normally where mountains exist, the highest range is also the watershed; but in the few cases where they diverge, the boundary tends to be the watershed range.

... it is now a well-recognized principle of customary international law that when two countries are separated by a mountain range and there are no boundary treaties or specific agreements, the traditional boundary tends to take shape along the crest which divides the major volume of the waters flowing into the two countries. The innate logic of this principle is self-evident. The inhabitants of the two areas not only tend to settle up to the intervening barrier but wish and seek to retain control of the drainage basins.37

Such a statement of course raises many well-known problems within the field of the political geography of frontiers and the Chinese side made good use of the opportunity so provided to exploit the anti-determinist line of argument in such issues. Thus:

Before citing historical facts and documents, the Indian side started by attempting to establish the boundary line it claimed by means of some abstract conceptions. The Indian side alleged that the boundary line it claimed consistently followed the main watershed and as a traditional customary boundary was defined mechanically or predetermined according to a certain single geographical principle and in high mountainous regions must of necessity conform to the main watershed, the boundary line it claimed was therefore the natural dividing line between China and India which had the strongest original basis in geography and was the only correct one. Such an assertion of the Indian side, in total disregard of the various complicated factors involved in forming a traditional customary line is obviously erroneous. It is well-known that a traditional customary line is formed gradually through a long process of historical development according to the extent up to which each side has all along exercised its administrative jurisdiction. Geographical features have a certain bearing upon the formation of a traditional customary line, but they are by no means the only or decisive factor.
... the traditional customary line follows different natural features in different sectors in accordance with the actual situation throughout the years of administrative jurisdiction and activities of the inhabitants of a country, and there is no reason why it should precisely run along the single feature of watersheds.38

Although the Chinese side uses the well-known technique of the anti-determinist of exaggerating the position of the environmentalist in order the more easily to discredit it, there nevertheless is much truth in the Chinese criticism.

In the first place, if the Himalayan watershed is of such compelling importance it is difficult to explain why the alignment claimed by India does not follow it in all instances. In the Western Sector the Indian alignment cuts across the headwaters of the Yarkand and Qara Qash Rivers of the Tarim (Sinkiang) Basin, transgressing the real watershed, just as the Chinese alignment cuts across the headwaters of the Shyok River of the Indus system and transgresses the real watershed in the opposite direction. Similarly the Indian alignment lays no claim to the upper Indus valley, the upper Sutlej valley, the great longitudinal valley of the upper Brahmaputra or Tsangpo, or to those sections of the valleys of the Dangme, Subansiri, and Luhit rivers which lie to the north of the McMahon Line. To include all the territory draining to the Indian Ocean as part of India would seriously impinge on traditional Tibetan sovereignty, and yet would be the logical outcome of absolute application of the watershed principle. In practice what India does is to modify the definition of a watershed to 'a line which divides the major volume of waters of two river systems', and indeed in the case of the Middle Sector of the frontier uses the watershed between two of her own rivers, the Sutlej and Ganges, as the basis of her claimed alignment. As the Chinese side were quick to point out 'such an equivocal definition can be used to make any wilful interpretation'.

Obviously implicit in the Indian definition of the 'watershed principle' are other environmental concepts, such as mountain barriers and climate differences. In the case of the former India admits that

The fact that a mountain barrier provides a natural dividing line and the watershed range a precise and easily discernible boundary alignment does not, of course, imply that such ranges form absolute barriers.

but then continues

... the Brahmaputra has its source north of the Himalayas and cuts through a gorge into the Indian sub-continent on its way to the sea. But clearly this does not detract from the impressive formation of the watershed along the Himalayan range and the clear division between the geographical unity of the Indo-Gangetic plains on the south and the Tibetan tableland on the north. Similarly it is manifest that there are passes all along the high mountains and that there are always contacts across the ranges. But
this does not invalidate the general conclusion that the watershed range tends to determine the limits of the settlements of the inhabitants on either side and to form the boundary between the two peoples. Neither the flow of rivers through the ranges nor the contacts of peoples across them can undermine the basic fact that a high watershed range tends to develop into the natural, economic and political limits of the areas on the two sides.39

Here again there are apparent inconsistencies in the Indian case. If the Himalayan Range constitutes such a divide why does the Indian alignment quit it in the Western Sector and swing northward across Ladakh to the Kuen Lun and Karakorum Ranges? Again, why does the Indian boundary with Nepal, Sikkim and Bhutan follow the foot and not the crest of the Himalayan Range? As I have pointed out elsewhere,40 and as the Chinese argued in the 1960 meetings, to mountain peoples mountains do not necessarily constitute barriers. This is a concept of lowlanders. On the contrary, to many of the hill tribes of Assam, for example, it is the marshy, malarial valley-bottom land that constitutes the greatest obstacle. Movement and settlement follow the ridge-tops and agriculture is an activity of the forested hillsides. Similarly in the Himalayan highlands the seasonal rhythm of transhumance and trade involves camping grounds and summer pastures in what to the lowlander is only barren, barrier country. The Himalayan area has functioned in the past not merely as a barrier dividing circumambient riverain communities but as a geographical region in its own right. It has received peoples and cultures from many directions, at various times, but has imposed on them its own peculiar régime born of the unity of the high places. Sometimes it has afforded a cultural link, a transition zone, between peripheral civilizations. At times it has grown sufficiently powerful to impose its will on the surrounding lowlands, while at other times it has been obliged to pay homage to lowland empires. Its leaders have sought refuge sometimes in India, sometimes in China, while it in turn has sheltered refugees from both. From these varied experiences it has usually emerged chastened and changed but nevertheless different from adjacent regions. What the Chinese officials failed to point out in the 1960 meetings was that in fact neither China nor India can claim exclusive parentage of Himalayan societies. This is not a simple case of two lowland peoples pushing up the opposing flanks of a narrow, unpopulated mountain range till they met at the crest or watershed. This is one of the earth’s greatest highland zones, nourishing its own complexities of race and culture, and exhibiting its own internal environmental contrasts. The Akas, Daffas, Miris, Abors and Ladakhis are no more ‘Indian’ than the varied Tibetan communities are ‘Chinese’. Buddhism, Hinduism (Indianism), animism, Communism, Mongolian eyes and Caucasoid noses do not conform to precise physical boundaries, and the physical efficacy of mountain barriers to divide depends on many factors besides altitude.

In the Indian definition of the watershed principle climate as well as topographic factors are implicit. Importance is attached not to the entire catchment
basin but to the well-watered part of the drainage area. Thus the Great Himalayan Range is seen as a major climate divide as well as a physical obstacle to movement; a barrier against the advance of monsoonal Indian Ocean air masses into the continental interior of Asia as well as an obstacle to land transport. This is particularly apparent on the eastern section of the frontier where the forested, ocean-facing flanks of the Himalayas contrast markedly with the arid, naked landscapes to the north. Archibald Rose, in his account of the Burmese frontier with Yunnan — eastward of the zone under consideration but part of the same Inner Asian frontier of the Indian Ocean Region — depicts this contrast in vivid terms:

There is a physical reality about the frontier which impresses one very clearly as the last shady miles of the Burma Road and looks down from a commanding peak over the two great empires stretching far away to the East and the West. On one side lies Burma, green and forest-clad as far as the eye can reach, the hills raising their wooded summits from a sea of white and billowing mists, whilst on the other side China stretches away to the sunrise, with hills that are bare of trees, rugged and weather-worn with every crevice standing clear in the still sparkling air of the winter morning.41

F. Kingdon Ward describing the same contrast in northern Burma relates it to the limits of Tibetan pastoralism:

But obviously a pass of 15,000 feet is nothing to a Tibetan who habitually lives at 10,000 or 12,000 feet altitude. The Tibetan is not stopped by physical but by climate barriers, and no boundary pillars are needed to make him respect these. His frontier is the verge of the grassland, the fringe of the pine forest, the 50 inch rainfall contour beyond which no salt is (until indeed you come to the sea) or the 75 per cent saturated atmosphere. The barrier may be invisible; but it is a far more formidable one to a Tibetan than the Great Himalayan ranges. If he crosses it he must revolutionize his mode of life.42

Here, then, is a great regional frontier: the northerly limit of the Intertropical Front in its summer advance across the northern seaboard of the Indian Ocean; a boundary between oceanic and continental air masses; a divide between forest and grass, between the shifting cultivator of leached forest soils and the nomadic pastoralist of salt-rich, highland pastures; a contact zone of different cultures. To the Hindu communities of the Gangetic plains this divide has been symbolized for millennia by the awesome, snow-capped Great Himalayan Range towering above the forests to the north. This was the abode of gods, the source of holy waters, their shield, the rim of the Indian world. Thus it is not surprising that modern India fervently believes that the Indian sphere, from the Shipki Pass in the west to the headwaters of the Irrawaddy in the east, has been
defined by nature and confirmed by history and requires no formal delimitation. Nor, in view of her environmental and political background, is it surprising that India regards the crest-watershed line of the Great Himalayan Range as the most satisfactory expression of this regional border for political purposes.

In a country of this type, where actual demarcation of boundaries is virtually impossible over long stretches, a recognizable natural line has much to commend it, and history is replete with examples of states using such alignments to mark the limits of their territorial sovereignty. There is nothing deterministic, or peculiarly British (as the Chinese claim), about this: indeed the alignment claimed by the Chinese along the foot of the hills in Assam is yet another example of the application of this principle. What is questionable, and often the cause of conflict, is the idea held by governments that where such a natural feature exists the state must of necessity expand to this alignment, or that natural frontier zones can be completely expressed by a single line. In this sense Indian claims for a crest-watershed boundary are entirely reasonable, but in the arguments put forward to support such claims there is a tendency to overstate the environmental case. The crest-watershed line does not coincide with all the linear elements of this complex regional boundary. The upper limit of tree growth on the southern flanks of the Himalayas, for example, normally occurs at about 12,000 feet, often well below the crest-watershed, and between the tree-line and the watershed there extends a zone of Alpine pasture. In the summer months when the snowline melts back to the higher slopes, and the passes are clear, this expanded grassland zone is used by transhumant groups from lower forest villages and by pastoralists from the north side of the watershed. Sometimes a group from one side of the watershed establishes a settlement on the other side but retains grazing rights in the territory from which it originated. At other times the splitting of communities has led to a fragmentation of traditional pastures or to the use of common pastures by several different communities. Near the passes certain camping grounds are used also as traditional markets where salt and other commodities from Tibet are traded for manufactured goods from India, and since most of the trade goods are transported by pack animals grazing land must be allocated nearby for the period of the market. In these and other ways a complex pattern of grazing rights and customs has arisen which often pays scant attention to watersheds and administrative boundaries. Unfortunately this fascinating complex of transhumance, trade, settlement and land-use has never been closely studied or mapped and thus it is scarcely surprising that both India and China in their efforts to establish proof of administrative priority in this zone are guilty of misinterpreting local customs in over-simplified, neat, lowland concepts. Scattered holdings and rights, islands of jurisdiction, are wrongly judged to give title to intervening territories. Visits of Tibetan officials to settlements south of the passes to arrange the season’s trade and to inspect animals travelling into Tibet are misconstrued by China as evidence of Tibetan administrative control. Evidence of revenue collection from particular settlements, quoted by India in support
of her case for exclusive administrative superiority, often overlooks the fact that many settlements paid dues to both India and Tibet.

If there are inconsistencies in the Indian identification of the major regional boundary of Southern Asia and High Asia with the crest-watershed line of the Great Himalayan Range in the Middle and Eastern Sectors of the frontier, where nature at least exhibits a majestic and bold symmetry, much greater difficulties are encountered in contending that the Indian alignment in the Western Sector coincides with a natural boundary, for here relief and climate are disposed in considerably more complex relationships. The Great Himalayan Range continues into this section with peaks of over 15,000 feet and it still functions as a barrier for southerly monsoon air, but the dominant position it holds further east is lost. In terms of elevation it is overtopped by the Karakoram Mountains to the north, while its function as the rim of the plains is to a large extent usurped by the Pir Panjal Range of Southern Kashmir. The latter achieves heights of over 14,000 feet, with passes normally at 10,000-12,000 feet, and is sufficiently high to nourish small glaciers on its northern slopes and to exclude some southerly air from the Vale of Kashmir which lies immediately to the north. In this area, however, the southerly air is not the only rain bringer. Westerly air streams at high altitudes and westerly depressions produce a substantial winter precipitation, mostly in the form of snow; and, since the air movement in this case is parallel to the main relief features, deep penetration results and no clear climatic limit occurs. Elevation, aspect and position thus play important roles in determining local climates, and vegetation; and, along with local variations of soil and surface forms, produce a veritable mosaic of small natural regions. The tree-line of the southern slopes of the Pir Panjal, for example, occurs at about 11,000 feet and in general declines in more northerly latitudes, but owing to the operation of local factors forest development is often more vigorous and widespread on north-facing slopes than on south-facing, and persists in certain favoured, sheltered localities where otherwise one would not expect a tree cover. Forest, grass and cultivable soil, and the ways of life associated with them, are thus disposed in a fragmented pattern that defies neat boundary definition. However, this much is clear — from time immemorial Indian culture has penetrated this area via the sub-Himalayan forest zone of Jammu and south Kashmir, that vital corridor between a semi-arid pastoral Punjab and the cold, highland deserts of pastoral Inner Asia; but Indianism has never been culturally dominant for very long outside this forest zone. Even in the Vale of Kashmir the population is mainly Muslim and the cultural links with India have largely been at an aristocratic level, from the time of the Moghuls to that of Mr. Nehru, while to the south the cultural contrasts with Islam were sufficiently strong to necessitate the creation of the state of Pakistan in 1947, in spite of the unified development of the Punjab instituted by Britain. But to the north of the Great Himalayan and Zaskar Ranges even Indian aristocracy and economic integration are absent. Physically and culturally this is for Indians an alien world, a world of extreme diurnal and seasonal
range of temperature, of rarefied atmosphere, of dry subsident continental air, of Alpine pastures and stunted trees, Muslim in the west and Buddhist in Ladakh, into which Indians came only on temporary visits as administrators, soldiers or traders through Leh.\textsuperscript{46} Much of this territory is still difficult to reach even at the right season, and even more hazardous to survive in at the wrong season, and the fact that China could build roads through Aksai Chin without Indian knowledge speaks eloquently of the absence of permanent Indian contact with this section of her Kashmiri frontier. In this arid land watersheds, or ice-and-meltwatersheds, are of great importance to the scattered communities of the valleys: the distribution of population, indeed, is largely controlled by the water and grass potentialities of catchment basins, and of all the areas of the frontier the watershed-principle in its purest form has here its greatest validity as an administrative device. But to argue that the watershed alignment claimed by India in this Sector represents the true, traditional limit of the Indian cultural and economic world is to fly in the face of all that is known of the social, historical and regional geography of the western Himalayas. There are real merits in a true watershed boundary here, but the case for the extension of Indian authority and sovereignty to this particular alignment must be argued on non-environmental grounds, if it is to avoid weakening other valid evidence.

\textit{Frontiers to Boundaries}

In the last analysis the Sino-Indian boundary dispute must be regarded as the culmination of a long process of boundary-making, the concluding act of an ancient political drama in which the behaviour of the actors is conditioned not only by the final stage setting but by the plot and action of earlier scenes.

During the early stages of this process the participant communities, Chinese, Indian and European, were widely separated by immense barriers of time and space. Apart from tenuous and intermittent cultural contacts\textsuperscript{47} each developed its own way of life and polity in a circumscribed environment and there were few indications that ultimately their political destinies would be linked. However, even in these early stages it is possible to discern certain basic similarities in their geopolitical situations. Each community was based on an agriculturally rich core area on the ocean margin of the Old World; each established political institutions to organize and defend such areas; and in consequence each had two frontiers, one towards the ocean and one facing the arid lands of Inner Asia. The later political history of all three was governed to a considerable extent by their respective attitudes to these two great frontiers.

At times China was active on both frontiers, sending armies and caravans deep into Inner Asia and fleets of junks on long voyages into the Pacific and Indian Oceans; but at other times she closed her coasts to commercial enterprise and tried to seal and stabilized her Inner Asian frontier by building fortifications such as the Great Wall.\textsuperscript{48} India, too, oscillated in her frontier policies. In periods of central strength Indian armies invaded Central Asia, but mountain
ranges such as the Hindu Kush (‘Hindu Slayer’) and Himalayas limited such operations and made it difficult for Indian empires to retain their conquests once their military power had waned. On the other hand, at times Indian seafarers were active on ocean frontiers, for example during the period 200 B.C.-A.D. 800 when Indian culture and colonists were carried to South-east Asia, while at other times the Indian seaboard was almost completely passive. In Europe, however, after the collapse of the Roman Empire and its successors, frontier activities were undertaken by separate nations. The Inner Asian frontier became the special prerogative of Russia, whereas the oceanic frontier became the responsibility of the maritime nations of Western Europe. After centuries of defensive activities both groups of European frontiersmen were able in the sixteenth century to sally forth from their forested homelands into territories beyond the ancient frontiers of Europe, and by one of the ironies of history and geography they were destined to meet again on another frontier in High Asia with their roles strangely reversed. Western Europeans, having transgressed the ocean frontier of southern Asia, were caught up in India’s landward frontier and moved from forested seabords towards the arid wastes of Inner Asia, while Russian forces pressed southward towards the sea.

At first advances into Inner Asia were made independently by the peripheral growth forces of each community, and by the nature and accessibility of pioneer terrains rather than by the spur of imperial rivalry. Frontiers were broad and zonal, a complicated structure of tribute and of political allegiances in the case of China, a tide of settlers and soldiers in the case of Russia, and a pattern of trading rights in the case of the English company that became an empire. Unless strong opposition was encountered there was little need for precise delimitation or demarcation of imperial limits. Boundaries that were in fact used by the imperial powers tended to be native, tribal boundaries, adopted as temporary expedients in the ebb and flow of frontier activity to differentiate those peoples under imperial control and protection from those outside such control. During the nineteenth century, however, the advance of imperial frontiers into Inner Asia underwent striking changes. The economic growth of the peripheral communities heightened the contrast between the densely populated oceanic margins of the Old World and its thinly populated interior. New agricultural techniques and implements resulted in a revaluation of interior grasslands. New techniques of war tipped the balance of military power in favour of the peripheral forces, and developments in transport gave them added mobility and facilitated deeper penetration of continental interiors. The power and tempo of frontier advance increased and distances decreased until a point was reached when each expanding community became aware of the approach of other frontiers across their respective horizons. From this time the political behaviour of the participants underwent a marked change, and a new stage in the process of boundary making was opened. Unilateral advance gave way to the strategic stage of ‘advance to contact’, as rival empires drew closer together and jostled for position.

In nineteenth-century India responsibility for the Inner Asian frontier fell
to Britain. Victory over France in the wars of the Napoleonic period had left Britain as undisputed master of the Indian Ocean region, and by the extension of control over seaboard areas she was rapidly transforming this into a British lake, the core of a second British Empire. Defence of this oceanic community, however, required more than power on the sea; it necessitated the erection of a defensive screen across the landward approaches to the region, particularly in southern Asia. Thus from port-bridgeheads of sea-power the imperial frontier advanced landwards on a wide front, from Burma in the east to the Persian Gulf in the west. India provided the keystone to this great arch of power and here the British Raj took over ground that had been prepared by the activities of the East India Company and the collapse of the Moghul Empire. British authority extended rapidly over the Gangetic plains and other settled lowland areas but ultimately the rulers of British India came into contact with the mountainous and arid tribal country of the north and west and were faced with the problem of how far to extend imperial control into such territory. In fact no final answer was ever given to this problem, and the ultimate Inner Asian frontier of British India was a compromise between those who counselled advance and those who advised consolidation.

At various times during this period authorities in England tried to bring the advance to a halt on the ground that further expansion into this difficult country would require an expenditure of men and money much in excess of the rewards to be gained, and attempts were made to stabilize the imperial border on the Indus and along the foot of the Himalayas. Some Viceroyso endeavoured to carry out such a policy, but the majority of those in direct contact with the frontier were in favour of a forward policy. Those in front cried forward and those behind called back, a common situation in the growth of the British Empire during the nineteenth century. But whether she willed it or not Britain was drawn inexorably towards Inner Asia by two main forces. The first of these was that mechanism of tribal frontiers described by Prince Gorchakov in his Memorandum of 1864 — the force of the ‘turbulent frontier’ whereby each advance of the imperial limit requires a further advance to defend those tribes under imperial protection from their hostile, uncontrolled neighbours. Most great empires have experienced this force of attraction at one time or another, drawing them ever deeper into tribal terrains, and, just as the Roman frontier in Britain moved northward with successive Romanization of British tribes, so the British frontier in northern India mounted the southern flanks of the Himalayan system and the arid uplands of Afghanistan in search of an alignment on which a great imperial boundary might rest. The second force of attraction was that engendered by the appearance of other frontiers in Inner Asia as described above. Of these the most powerful and menacing was the Russian frontier which was advancing rapidly across central Asia towards the Oxus and the Hindu Kush. The Chinese frontier could not be entirely ignored, but after its period of great activity in the late eighteenth century the imperial expansion of China had slowed down somewhat and did not constitute as great
a threat as Russian expansion. Thus British frontier policy was most active in those sectors immediately threatened by Russia and in the Tarim Basin and neighbouring areas Britain supported Chinese claims as a counter to Russian ambitions.

Between 1884 and 1895 British and Russian boundary commissioners delimited and largely demarcated the northern boundary of Afghanistan as a divide between their respective spheres of political interest, and through the agency of Sir Mortimer Durand, Afghanistan assumed control of the remote valley of Wakhan to close the gap in the frontier system between Afghanistan and Kashmir. Here in the Pamirs was established one of the most important boundary tri-junctions in history: the point where, in Sir Thomas Holdich’s words, ‘amidst a solitary wilderness, 20,000 feet above sea-level, absolutely inaccessible to man and within the ken of no living creature except the Pamir eagles, the three empires actually meet’. The ‘advance to contact’ stage appeared to be over, and the stage of actual contact and conversion of frontiers to boundaries about to begin. Throughout the world the nineteenth century had been notable for the growing together of frontiers and the creation of boundaries, and now it seemed that the greatest case of all was about to be closed by some of the greatest boundary-makers of all time. Yet in fact this was never achieved. All the skill and experience of frontier statesmen such as Sir Henry Durand, Lord Curzon, McMahon and Holdich, boundary-makers to the world, failed to establish a final, incontestable Inner Asian boundary for India. Of the entire Himalayan frontier east of the tri-junction, only the northern boundary of Sikkim is precisely demarcated.

Many reasons can be put forward in explanation of this failure to finalize boundary arrangements. The nature of the Himalayas made precise demarcation a difficult if not impossible task, and British statesmen relied on the barrier divide of the Great Himalayan Range to provide a ‘God-given boundary set to such a vast, impressive and stupendous frontier’. The continuing weakness of China did not create that sense of urgency which had stimulated British activity on the Russian sector of the frontier; and, apart from the occasional flurry, the North-East Frontier ‘remained hazy in its geographical limits, peaceful in its policies, and happy in the dullness of its annals’. Those attempts which were made to negotiate firm boundaries with China, in northern Kashmir and elsewhere, were frustrated by Chinese inability or refusal to see the need for such boundaries. The problem of getting a militarily weak, politically elusive, and at times virtually non-existent Chinese Central Government to reach any decision at all proved almost insoluble, and compromised the legal basis of any actions taken by Britain with Chinese frontier dependencies. Fear of extending limited military resources too widely over this vast frontier zone, and too far from sea-bases, may also have contributed to this lack of British decisiveness on the borders of China, but probably one of the most important factors of all was the policy of creating buffer states. The screen of buffer states and administered tribal territories which Britain erected on the Inner Asian frontier of her Indian
Empire was designed to avoid conflict between the Great Powers when their frontiers collided and to reduce the real risk of major war to a level of petty border squabbles.\textsuperscript{53} In this British frontier policy was eminently successful and major wars were avoided, but the price paid for such Victorian peace is now apparent. It had the effect of fossilizing the structure of the frontier zone for over half a century, thus reducing the force of direct contact and the necessity of boundary-making. The Inner Asian frontiers of India remained frontiers rather than boundaries.\textsuperscript{54}

The fossilizing effect of \textit{Pax Britannica} on the life of Southern Asia was of course not confined to the process of boundary-making, but influenced many aspects of economic, social and political activity, including the struggle for power between Islamic and Hindu communities. There is little doubt that but for the presence of Britain this communal struggle would have run its course and that neither India nor Pakistan would have achieved their present political and territorial forms. The withdrawal of British power and protection in 1947 removed this stabilizing effect and set in motion all those processes which had been held in check for so long. Fortunately, arrangements had been made to confine the internal communal struggle within prescribed territorial bounds, but unfortunately less thought had been given to external frontiers. During the last fifteen years national forces have advanced into the frontier zone from both north and south with a speed and ruthlessness which would have shocked the most ardent nineteenth-century British imperialist. The buffer zone has been steadily eroded by both China and India, and the chances of war between these two great Asian powers greatly increased. Passive resistance and neutrality, India’s twin weapons in international affairs, are of no avail in this situation and against this opponent. Nor are vague arguments of ancient Moghul rights in Himalayan territory. India now faces a geopolitical situation encountered by many a nineteenth-century nation state and empire, and must find a belated solution for the problems which arise when a frontier zone narrows to a boundary line. The British compromise has been abandoned, probably quite rightly, but the only alternative is a boundary line negotiated primarily on the basis of present political control and former British administration. The settlement of the Sino-Burmese border dispute\textsuperscript{55} is a different case and should not be regarded over-optimistically as an indication of China’s sympathetic treatment of the boundary claims of neighbouring states. In the collision of great powers cease-fire lines have a tendency to become boundaries, and under present circumstances, when peace may be defined as war carried on by other means, the strategical quality of boundary alignments cannot be ignored. With the rape of Tibet China is now in a powerful strategic position in relation to the whole of southern Asia and the northern seaboard of the Indian Ocean region, and the return of Aksai Chin with its military highways would appear to be a forlorn Indian hope. However, further erosion of Ladakh may be avoided, particularly if India and Pakistan can find a solution to the Kashmir problem, and with India now fully alive to the responsibilities entailed in the inheritance of an imperial frontier
further Chinese military encroachments into the southern glacis of the Himalayas would seem unlikely. The strategic value of this zone to China adds little to that ensured by the occupation of Tibet and is certainly not enough to justify the risk of a major war over its possession. Apart from Aksai Chin the alignment claimed by India would appear to satisfy the majority of Chinese strategical requirements, and since legal confirmation of Indian possession of those territories she already occupies on the southern glacis would not change the strategical situation vitally, but might appear to compensate for the loss of remote, unoccupied Aksai Chin, it is probable that ultimately, with or without ‘negotiation’, a boundary line will be adopted that closely follows the Indian alignment. With its definition an epoch of boundary-making will close, another section of the Great Frontier of the Old World will fall into place, and one can hope as Rose did exactly half a century ago that

India and China must meet along some thousands of miles of frontier and meet as neighbours willing to work hand in hand towards the solution of those difficult border problems which beset them both, the administration of the tribes, the substitution of justice, and law, and order, of well-protected trade and agricultural prosperity for the feuds and individualism and poverty that have marked the tribal belt in the past.56

The ‘turbulent frontier’ would then exist only in the minds of men.

NOTES

1 K. M. PANIKKAR, Geographical Factors in Indian History (Bombay, 1955), ix.
6 . . . such as Sayul and Walong, and in the direction of Penakoe, Lonag, Lopa, Mon, Bhutan, Sikkim, Darjeeling and others on this side of the River Ganges, and Lowo, Ladakh etc. up to the boundary of Yarkhim.
7 K. M. Panikkar, India and China (Calcutta, 1957) attempts to give Sino-Indian friendship a long history; but compare Shao Chuan Leng, ‘India and China’, Far Eastern Survey, 21 (1952), 73-78.
8 The Panch-shila comprise (1) Mutual respect for each other’s territorial sovereignty and integrity; (2) mutual non-aggression; (3) mutual non-interference in each other’s internal affairs; (4) equality and mutual benefit; and (5) peaceful coexistence.
9 Chinese Trade Agencies were to be established in India at New Delhi, Calcutta and Kalimpong and Indian Agencies in Tibet at Yatung, Gyantse, and Gartok. India, however, has found great difficulty in establishing her Agencies.
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states'. While transferring Kashmir 'for ever in independent possession to Maharajah Gulab Singh and the heirs male of his body', Gulab Singh undertook not to change at any time the limits of his territory without the concurrence of the British Government (Art. IV); to refer all disputes with neighbouring States to the British Government (Art. V); to join with British forces when they campaigned in the mountains (Art. VI); never to employ any British, European or American [sic] in his services without the consent of the British Government (Art. VII); to pay an annual token tribute (1 horse, 12 shawl-goats and 3 pairs of Kashmir shawls) to the British Government (Art. X). In return the British Government undertook to protect the territories of the newly constituted state from external enemies.

27 Battle of Drangte, 1842.
28 Presumably those established in 1684 when a Ladakhi army with the aid of the Moghul Governor of Kashmir repelled an invasion of Ladakh by a mixed force of Mongols and Tibetans and concluded a peace treaty with Tibet.
30 CAPT. HENRY STRACHEY surveyed the eastern and southern boundaries of Ladakh as Boundary Commissioner in 1847-48 but did not visit Northern Ladakh. His map Nari Khorsum including the Easternmost Parts of Ladakh with the contiguous districts of Monyul (1851) shows the Indian alignment in South-east Ladakh. A second map of STRACHEY'S, Ladakh with the adjoining parts of Balti and Monyul (1851) clearly indicates that Northern Ladakh had not been surveyed at this time and since JOHN WALKER'S Map of the Punjab and Western Himalayas (1854) was based on Strachey's work the northern boundary it shows for Ladakh was only an intelligent guess. Later, more accurate surveys are recorded in Reports of the Great Trigonometrical Survey of India for 1865 and succeeding years.
31 CAPT. HENRY TROTTER, Report of a Mission to Yarkand in 1873 (Calcutta 1875), 285.
32 Geological surveys were also made in the upper Shyok, Chang Chenmo and Spanggur area by Richard Lydekker (1875-82). A full account of such surveys is given in Memoirs of the Geological Survey of India, 22 (1883).
33 Memorial of British Commissioners, 11 January 1751. Dispute Concerning the Limits of Nova Scotia or Arcadia 1750-1751. Quoted as Document No. 1430, Joint Appendix Canada-Newfoundland Boundary Dispute in Labrador Peninsula, 8 (1926), 3755.
34 Opinion and Award of Guatemala-Honduras Special Boundary Tribunal (1933), 8.
36 Compare C. C. HYDE, 'Maps as evidence in international boundary disputes', American Journal of International Law, 27 (1933), 311-16. For another instance of map-'claimed' boundaries see A. E. MOODIE, The Italo-Yugoslav Boundary (1945).
41 ROSE, op. cit., 195.
42 F. KINGDON WARD, 'Explorations on the Burma-Tibet Frontier', Geographical Journal, 80 (1932), 469.
43 The Pyrenees and Alps in Europe provide many examples of watershed alignments (but compare S. C. GILFILLAN, 'European Political Boundaries', Political Science Quarterly, 39 (1924), 458-84); much use of the principle was also made in Africa during the colonial era (see K. M. BARBOUR, 'A Geographical Analysis of Boundaries in Inter-Tropical Africa' in K. M. BARBOUR and R. M. PROTHERO, eds., Essays on African Population (1961), 303-23, particularly with reference to the boundaries of the Congo; and R. J. HARRISON CHURCH, 'African Boundaries' in W. G. EAST and A. E. MOODIE, eds., The Changing World (1956), 740-56); but probably the closest comparison to the Sino-Indian case is provided by the Argentine-Chile boundary dispute in the latter part of the nineteenth century when a watershed definition very similar to that proposed by India was put forward by the litigants at the Treaty of Buenos Aires (1881), namely, 'the highest crests of the said [Andean] cordilleras which might divide the waters and shall pass between the slopes which descend at either side.' See inter al. S. W. BOOCS, International Boundaries (New York, 1940); GORDON IRELAND, Boundaries, Possessions and Conflicts in South America (Cambridge, Mass., 1938); T. H. HOLDICH, The Countries of the King's Award (1904) and Political Frontiers and Boundary Making (1916).
For diagrams of rainfall régimes and main climatic regions see, for example, H. Walter and H. Lieth, *Klimadiagram Weltatlas* (Jena, 1960), Map 23.


E. Huntington, *The Pulse of Asia* (1907); G. Dainelli, *Buddhists and Glaciers of Western Tibet* (1933), and F. Youngusband, *The Heart of a Continent* (1896), contain many vivid descriptions of this Inner Asian world.


The dynastic rather than territorial nature of early Indian empires should be remembered in this respect also. Compare Winifred M. Day, ‘Relative Permanence of Former Boundaries in India’, *Scottish Geographical Magazine*, 65 (1949), 113-22.


For the operation of this mechanism elsewhere in the British Empire see John S. Galbraith, ‘The “Turbulent Frontier” as a factor in British Expansion’, *Comparative Studies in Society and History*, 2 (1960), 150-68.


Buffer States — Their historic service to peace’, *Round Table*, 45 (1954-55), 334-45.


Agreement between Burma and China on the boundary question, very similar to that reached between Nepal and China, was signed on 28 January 1960 by Ne Win and Chou En Lai.

Rose, *op cit.*, 217.